

## REMARKS

Applicants thank the Examiner for the courtesies extended during the July 6, 2005 interview.

The Examiner has objected to the specification because various graphs etc. are present in the specification. Applicants have removed the graphs, etc. from the specification and present them as figures and amended the specification to identify the new figures.

The Examiner has objected to the amendment to the specification. Applicants have amended the specification to be compliant with the Examiner's requirement.

The amendment submitted on 7 April 2005 was not entered resulting in the rejection on claims 1 to 17 because the amendment did not supply required drawing corrections. Corrected drawings are provided with this amendment.

The request to place the application in a condition for allowance was denied because:

- 1) The proposed amendments were rejected for being non-compliant (for including text included in a previous amendment) and non-responsive (for not including corrected drawings).
- 2) Requests to withdraw objections to amendments on the bases that they included new matter were denied. Amendments to the specification submitted at this time address the first issue; the arguments below address each new matter rejection in the second issue.

Support for matter in amendments to the application:

- a) Claim 1 was amended to include "and wherein the pH of the resulting fluid is from about 9.0 to less than about 10.0." This was rejected to by the Examiner because "There is no indication that the protectant is in the form of a fluid." Page 30, line 7 of the application as filed states " wherein the fluid is a wood protectant" In addition, Wolman E, used in all of the examples of the specification, is an aqueous based amine solution (p. 6, lines 4 to 5 and p.4, lines 12 to 14) for the protection of wood based products against fungal and insect deterioration. In order to be impregnated into wood, an aqueous solution has to be a fluid. A MSDS and product label, contemporaneous with this application's filing date, for Wolman E showing that it is a fluid and the concentration are attached.
- b) Claims 12 and 13 were amended to include "the mole ratio of wood protectant to carbon dioxide is from about 1:0.05...to about 1:1." The mole ratios were obtained from the definitions of Wolman E given in the specification and on the product label and from Example 1. Wolman E is a copper amine solution formed from the addition

of basic copper carbonate to an aqueous ethanolamine. The resulting molecule or active component contains 1 mole of copper and 4 moles of ethanolamine (p. 4, lines 12 to 16). The copper-amine complex has a molecular weight of about 308 g/mole. CO<sub>2</sub> has a molecular weight of 44 g/mole. Tables 1 to 4 indicate that from 5 to 50 grams of CO<sub>2</sub> were added to about 960 g of Wolman E concentrate. Wolman E concentrate contains 9.25 % copper, as stated in its product label. Therefore,

$$5 \text{ g CO}_2 \times \frac{\text{mole CO}_2}{44 \text{ g CO}_2} = 0.11 \text{ mole CO}_2 \text{ and}$$

$$960 \text{ g Wolman E} \times \frac{0.0925 \text{ g Cu}}{\text{g Wolman E}} \times \frac{\text{mole Cu - amine}}{64 \text{ g Cu}} = 1.39 \text{ g Cu - amine}$$

The resulting mole ratio is thus 1:0.08. For 50 g CO<sub>2</sub>, the resulting mole ratio would be 1:0.8.

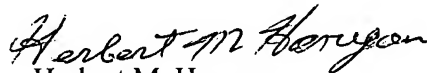
- c) Amended claim 1 states “and wherein the pH of resulting fluid is from about 9.5 to less than 9.6” and claim 17 stated that “the pH is from about 9.3 to about 9.5.” These statements are supported by all six of the examples provided in the specification. Examples 1 and 2 balance two concerns brought forth in the specification the need to obtain stable dilutions of the preservative concentrate, Example 1, and the need to prolong the life of additives such as a moldicide, Example 2. Example 1 (p. 6, line 15 to p. 7, line 24, re-numbered Figures 1 to 4, and Tables 1 to 4) states that “An experiment was set up to determine the amount of CO<sub>2</sub> needed to lower the pH of the solution.” The solution is the wood protectant Wolman E. The results from this experiment show that when approximately 0.5 to 5.5 weight % CO<sub>2</sub> was added to the Wolman E concentrate, the resulting pH of the solution was reduced from about 10.6 to 8.8. Although some precipitate was noted when a dilution of the concentrate having a pH of 9.5 was made, the extended stability of this solution suggested that lower pH concentrates would be acceptable. (As noted in the specification, it was discovered that the precipitate was from the BCC used to produce Wolman E.) Example 2 (p. 7, lines 6 to 8, p. 11, lines 1 to 9, and re-numbered Table 5 [old Table 4A]) was conducted to show how the stability of the moldicide K18500 was enhanced when it was added to solutions of Wolman E with different pH levels. This shows that by lowering the pH of the solution from 10.37 to 9.15 through the addition of CO<sub>2</sub> the lifetime of the moldicide was extended from 7 days to 30 days. Example 3, including renumbered Figures 5 to 8 [old Figures 1 to 4] demonstrates enhanced penetration of Wolman E through the addition of CO<sub>2</sub> from CO<sub>2</sub> gas or ammonium bicarbonate. The adjustment of Wolman E solution pH for the treatment of the red pine samples is apparent from the addition of CO<sub>2</sub> as described in Example 1. Example 4, including re-numbered Table 6 [old Table 5], and Example 5, including all un-marked tables on p. 19 to 24, also do not explicitly state the adjustment of Wolman E solution pH, but it is apparent as in Example 3. Example 6 and the table on p. 26 states “This treatment used [Wolman E Type] CA-B concentrate with enough CO<sub>2</sub> added to bring the pH to 9.6.”

Reconsideration of the rejection of Claim 1 is requested in light of the information provided in a) and c) above.

- d) Claim 8 was amended to include a method through which the wood is additionally impregnated with other modifiers "at the time said wood substrate is impregnated with said wood protectant." Although it is technically feasible to impregnate wood in two or more steps, it is usually not done on a commercial scale because of added handling costs and time. It is thus commercially feasible that a single simultaneous impregnation process is used in which materials providing additional benefits are added to the aqueous solution containing protectant. The addition of moldicide in Example 2 (p.7, line 6 to 10) demonstrates this. The addition of moldicides and water repellents is done extensively in commercial practice.
- e) Claims 10 and 11 were amended to state that the amount of CO<sub>2</sub> added to the protectant is done so on the weight bases of the "wood protectant fluid" In all the examples of the specification CO<sub>2</sub> is added to the wood protectant fluid Wolman E. Please see paragraphs a) and c) above. Example 1 Tables 1 to 4 provide the actual weights of both CO<sub>2</sub> and Wolman E. Example 3 re-numbered Figures 7 and 8 [old numbers 3 and 4] show weight percent of CO<sub>2</sub> added to Wolman E.
- f) Claims 12 and 13 were amended to claim a method in which the "mole" ratio of wood protectant to CO<sub>2</sub> is within the range from about 1: 0.05 to about 1:1. These ratios were derived from the examples in the specification as demonstrated in b) above.

In view of the above amendments and remarks reconsideration and withdrawal of the rejections of Applicant's claims and a Notice of Allowance is respectfully requested.

Respectfully submitted,



Herbert M. Hanegan

Reg. No. 25,682

Attorney for Applicant

SMITH, GAMBRELL & RUSSELL, LLP  
Suite 3100, Promenade II  
1230 Peachtree Street, NE  
Atlanta, GA 30309-3592  
(404) 815-3664

PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND  
DOMESTIC ANIMALS

DANGER

Corrosive. Causes irreversible eye damage or skin burns. May be fatal if absorbed through skin. Harmful if swallowed. Do not get in eyes, on skin or on clothing. Wear goggles or face shield. Wear protective clothing and rubber gloves. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Remove contaminated clothing and wash clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT

- Applicators and other handlers must wear:
- Coveralls over long-sleeved shirt and long pants,
- Socks and chemical resistant footwear,
- Goggles or face shield,
- Chemical-resistant gloves (such as: Barrier Laminate or Viton),
- A NIOSH-approved respirator with an ammonia, organic, and HEPA cartridge such as P-100.

USER SAFETY REQUIREMENTS AND RECOMMENDATIONS

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. User should remove personnel protective equipment immediately after handling this product. Wash outside of gloves before removing. As soon as possible wash thoroughly.

ENVIRONMENTAL HAZARDS:

This product is toxic to fish and wildlife. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of EPA.

Net Contents:

Wolman® E

For Industrial Use Only  
INGREDIENTS:

ACTIVE INGREDIENTS:	
Basic Copper Carbonate-	16.10%
Boric Acid	9.25%
Tebuconazole: alpha-(2-(4-chlorophenyl)ethyl)-alpha-(1,1-dimethylethyl)-1H-1,2,4-triazole-1-ethanol	0.37%
INERT INGREDIENTS:	74.28%
Total	100.00%
•Mixed inorganic copper complexes may be expressed as copper oxide equivalent 11.6%.	

KEEP OUT OF REACH OF CHILDREN  
DANGER

FIRST AID

IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
  - Do not induce vomiting unless told to do so by poison control center or doctor.
  - Have person sip a glass of water if able to swallow.
  - Do not give anything by mouth to an unconscious person.
- IF ON SKIN OR CLOTHING:
- Take off contaminated clothing.
  - Rinse skin immediately with plenty of water for 15-20 minutes.
  - Call a poison control center or doctor for treatment advice.
- IF IN EYES:
- Hold eye and rinse slowly and gently with water for 15-20 minutes.
  - Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
  - Call a poison control center or doctor for treatment advice.

IF INHALED:

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable by mouth-to-mouth if possible.
- Call a poison control center or doctor for further treatment advice.

See side panel for additional precautionary statement.

Have the MSDS or label with you when calling a poison control center or doctor, or going for treatment.  
**FOR MEDICAL EMERGENCIES: 1-800-837-0496**  
Outside USA: 404-616-9000

"NOTE TO PHYSICIAN": Probable mucosal damage may contraindicated the use of gastric lavage. If breathing has stopped or is difficult, administer artificial respiration or oxygen as indicated.

**DIRECTIONS FOR USE:** It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Wolman E is a formulation of mixed inorganic copper complexes which may be expressed as copper oxide equivalent for the formulation of Copper Azole wood preservative solution. Contents for use only in pressure-treating wood products. Do not attempt to use without reading the Manual and having the necessary safety equipment. To be used only in vacuum pressure impregnation of wood products utilizing water solutions having concentrations ranging from 0.3 percent to 3.0 percent by weight. Impregnation procedures must rigidly adhere to the current specifications of Arch Wood Protection and/or the American Wood-Preservers' Association.

Processes used to apply Copper Azole formulations shall leave no visible surface deposits on the wood, as defined by AWP/PA Standard PS-96. Visible surface deposits means a surface residue or crystallization on the treated wood. Small isolated or infrequent spots of chemical on otherwise clean wood shall be allowed.

Pressure treatment of wood products with this Copper Azole wood preservative provides wood with protection against termites, ascomycetes, white rot, brown rot and dry rot.

STORAGE AND DISPOSAL:

Do not contaminate water, food, or feed by storage or disposal. **PESTICIDE STORAGE:** Store in a cool, dry and well-ventilated area. Keep in tightly closed containers. Store away from incompatible materials. Protect containers from physical damage. Observe all applicable local, state, federal guidelines for storage and disposal.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incinerate, or, if allowed by state and local authorities, burn. If burned, stay out of smoke.

**WARRANTY:** We warrant this material to comply with our published specifications and to be of good merchantable quality and such as will regularly pass in the trade for goods within the description, and further warrant it to be fit for the normal purposes for which such goods are used. We assume no responsibility that this material is fit for any particular purpose outside of the general purposes of goods of the description.

Manufactured for Arch Wood Protection, Smyrna, GA 30080  
ACEAN 24-hr. Emg. Resp. 800-654-6911

EPA Registration No.: 62190-18  
073852-CA-001  
Establishment No.: 073852-OH-001  
AWPL34-R006-10-02

**MATERIAL SAFETY DATA SHEET**  
**WOLMAN® E WOOD PRESERVATIVE CONCENTRATE**  
June 1, 2003

---

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier:** Wolman® E Wood Preservative Concentrate

**General Use:** General-use pesticide for wood preservative. **EPA Reg. #** 62190-18

**MANUFACTURER:**

ARCH TREATMENT TECHNOLOGIES, INC.  
3941 Bonsal Road  
Conley, Georgia 30288  
MSDS Information: 1-800-511-6737

**EMERGENCY TELEPHONE NUMBERS:**

\*CHEMTREC Assistance: 1-800-424-9300  
\*CANUTEC: 1-613-996-6666  
ACEAN 24 Hour Emg Resp: 1-800-654-6911  
\*Use only during transportation emergencies

---

**2. COMPOSITION / INFORMATION ON INGREDIENTS**

HAZARDOUS INGREDIENTS	CAS #	EXPOSURE LIMITS (mg/m <sup>3</sup> )		
		OSHA-PEL	ACGIH-TLV	ACGIH-STEL
Copper	7440-50-8	1.0 (as Cu)	1.0 (as Cu)	
Boric Acid	11113-50-1	15.0 (PNOR)	10.0 (PNOR)	
Tebuconazole	107534-96-3	Not Established	Not Established	
Monoethanolamine	141-43-5	6.0	7.5	15
Diethanolamine	111-42-2	Not Established	2 Skin	
Inert Ingredients (and H <sub>2</sub> O)	NA	Not Established		

---

**3. HAZARDS IDENTIFICATION**

**Inhalation:** Product may cause upper respiratory irritation.

**Eye Contact:** Product may cause severe eye irritation or possible eye burns.

**Skin Contact:** The product has been shown to cause skin irritation in rabbits.

**Ingestion:** Product may cause moderate to severe gastrointestinal irritation resulting in nausea, cramps and/or diarrhea. Possible systemic effects of swallowing this product may include kidney and liver damage, central nervous system depression, cyanosis, skin sores, convulsions, and collapse or coma.

---

**4. FIRST AID MEASURES**

**Inhalation:** Remove from exposure. If severe breathing difficulty should arise immediately seek medical aid. If breathing has stopped, administer artificial respiration or oxygen.

**Eye Contact:** Exposed eyes should be flushed with large amounts of saline or water for at least 15 minutes, (greater than 1 liter per eye, minimum) using low pressure, taking care that the eyes remain open during this entire procedure. If wearing contact lenses, immediately flush eyes with water for a short period prior to removing contacts, then resume flushing procedures as described above. Immediately seek medical aid.

**Skin Contact:** Flush exposed skin with large amounts of water. Then use soap and water to clean area. Remove contaminated clothing. Seek medical aid if severe irritation develops.

**Ingestion:** DO NOT induce vomiting. Seek medical aid immediately. Do not attempt to give anything to an unconscious person. Call a physician or poison center at (800) 837-0496 (Outside the US call 1-404-616-9000.)

---

**5. FIRE FIGHTING MEASURES**

**Flash Point** >200°F  
**Auto-ignition** NA

**Lower Explosive Limit** NA  
**Upper Explosive Limit** NA

**Extinguishing Agents:** Use water, dry chemical, or other common extinguishing media.

**Fire-Fighting Procedures:** Fire from a separate fuel source may be intense enough to cause thermal decomposition releasing toxic fumes and/or gases. Wear complete fire service protective equipment, including full-face NIOSH and NFPA – approved self-containing breathing apparatus.

**Fire and Explosion Hazard:** Minimal fire and explosion hazard when exposed to heat or flame.

*\*Do not weld on empty uncleaned containers.*

---

## 6. ACCIDENTAL RELEASE MEASURES

**Spill or Leak Procedures:** (Product): Stop leak if no risk involved. Contain spill by using an inert non-biodegradable absorbent material (e.g., kitty litter or synthetic absorbents). Shovel into an appropriate container and dispose of waste in accordance with federal, state and local regulations. If material can be recovered, use a vacuum system designed for liquid recovery. Keep all unnecessary personnel away from the spill area. Keep open flames or ignition sources away. If a reportable quantity (RQ) is released into the environment, report to the National Response Center (1-800-424-8802), the State Emergency Planning Commission (SERC), the Local Emergency Planning Committee (LEPC) and/or your local fire department depending on availability.

**Reportable Quantities:** If 116 gallons (1250 lbs.) of Concentrate is released into the environment, the diethanolamine RQ of 100 pounds will be exceeded.

**Waste Disposal:** As of the date on this MSDS, this product is not considered a hazardous waste under 40 CFR part 261. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Check local and state regulations, as they may be more stringent.

---

## 7. HANDLING AND STORAGE

**Storage Conditions:** KEEP FROM FREEZING (above 40F) as product gets very viscous. Store in a cool, dry and well ventilated area. Keep in tightly closed containers. Store away from incompatible materials. Protect containers from physical damage. Observe all local, state and federal guidelines for storage and disposal.

**Caution:** Avoid contact with skin, eyes, and clothing. Wear protective goggles/shield, gloves and clothing. Avoid breathing mist and vapors. Keep use areas well ventilated. Wash thoroughly after handling. Remove any contaminated clothing. An eyewash and shower (quick-drench facility) should be maintained in the work area.

---

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Respiratory Protection:** None normally required. However, if airborne concentrations exceed established OSHA PEL, use NIOSH approved air-purifying respirator equipped with combination organic, ammonia and P100 high efficiency particulate filters (HEPA).

**Eye Protection:** Splash-proof chemical goggles and face shield should be worn wherever splash hazards exist.

**Skin/Foot Protection:** PVC, polyethylene or neoprene gloves are recommended. Wear long sleeves, pants and leather or rubber shoes. Coveralls or aprons if needed.

**Ventilation:** Provide adequate ventilation to keep airborne levels of contaminants below OSHA PEL levels.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Blue Liquid	<b>Specific Gravity (Water =1)</b>	1.286 @ 25°C
<b>Odor</b>	Amine	<b>Boiling Point</b>	107°C
<b>Solubility in Water</b>	Soluble	<b>Vapor Density (Air=1)</b>	NA
<b>Physical State</b>	Liquid	<b>Vapor Pressure</b>	NA
<b>pH</b>	9.0 – 11.00	<b>Freezing Point</b>	<-30°C

---

## 10. STABILITY AND REACTIVITY

**Conditions contributing to instability:** Stable under normal conditions.

**Incompatibilities:** Oxidizers, strong acids, cellulose nitrates, sodium hypobromite, acetylene, hydrazine, nitromethane, aluminum, and zinc.

**Hazardous Reactions/Decomposition/Combustion Products:** Toxic or hazardous oxides of carbon and/or nitrogen.

**Hazardous Polymerization:** Not known to occur.

---

## 11. TOXICOLOGICAL INFORMATION

**Oral Toxicity:** LD50= 547 mg/kg (rat testing)

**Dermal Toxicity:** LD50= >2,000, <5,000 mg/kg

---

## 12. ECOLOGICAL INFORMATION

This product is toxic to fish and wildlife. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to the discharge. Do not discharge this product into sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of EPA.

---

## 13. DISPOSAL CONSIDERATIONS

As of the date on this MSDS, this product is not considered a hazardous waste under 40 CFR part 261. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Check local and state regulations, as they may be more stringent.

---

## 14. TRANSPORT INFORMATION

**DOT Hazardous Material Classification:** Ethanolamine solutions, 8, UN2491, III  
**Use North American Emergency Response Guide # 153**

---

## 15. REGULATORY INFORMATION

**CERCLA/SARA (40 CFR 302.4):** Diethanolamine has a reportable quantity of 100 pounds. Reportable quantity for Wolman E is 1,250 lbs, 116 gallons.

**SARA 311/312 (40 CFR 370):** This product is an OSHA hazardous material under 29 CFR 1910.1200, therefore, it is regulated under the Superfund Amendments and Reauthorization Act (SARA) Sections 311 and 312. A facility must report chemical storage quantities that equal or exceed 10,000 pounds anytime during the reporting year to the appropriate state and local agencies.

**SARA 313 (40 CFR 372):** This product requires a Toxic Release Inventory reporting for individual material uses of 25,000 pounds or more. Reporting is under Copper Compounds and Diethanolamine,

**RCRA (40 CFR 261):** As of the date of this MSDS, this product is not considered a hazardous waste under 40 CFR part 261. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Check local and state regulations, as they may be more stringent.

**OSHA (29 CFR 1910.1200):** This product is regulated by the Occupational Safety and Health Administration (OSHA) under the Hazard Communication Standard (29 CFR 1910.1299)

**NFPA:** 2-Health, 0-Flammability, 0-Reactivity

**HMIS Ratings:** Health: 3 Flammability: 0 Physical Hazards: 0 PPE: Chemical Goggles, Gloves

---

## 16. OTHER INFORMATION

### ABBREVIATIONS

<b>OSHA</b>	Occupational Safety and Health Administration	<b>TLV</b>	Threshold Limit Value
<b>NFPA</b>	National Fire Protection Association	<b>STEL</b>	Short-Term Exposure Limit
<b>FIFRA</b>	Federal Insecticide, Fungicide and Rodenticide Act	<b>RCRA</b>	Resource Conservation and Recovery Act
<b>CERCLA</b>	Comprehensive Environmental Response, Compensation, and Liability Act	<b>ACGIH</b>	American Conference of Governmental Industrial Hygienists
<b>SARA</b>	Superfund Authorization and Reauthorization Act	<b>NIOSH</b>	National Institute of Occupational Safety and Health
<b>PEL</b>	Permissible Exposure Limit	<b>TSCA</b>	Toxic Substances Control Act
<b>DOT</b>	Department of Transportation	<b>IARC</b>	International Agency for Research on Cancer
<b>NTP</b>	National Toxicology Program	<b>IBC</b>	International Building Code
<b>CFR</b>	Code of Federal Regulations	<b>mg/m3</b>	Milligrams per cubic meter
<b>CWA</b>	Clean Water Act	<b>CAA</b>	Clean Air Act
<b>CAS</b>	Chemical Abstracts Service		

**NOTICE:** While the information and recommendations set forth herein are believed to be accurate as of the date hereof, Arch Treatment Technologies, Inc. makes no guarantee or warranty, expressed or implied, as to the accuracy, reliability, or completeness of the information.

PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND  
DOMESTIC ANIMALS

DANGER

Corrosive. Causes irreversible eye damage or skin burns. May be fatal if absorbed through skin. Harmful if swallowed. Do not get in eyes, on skin or on clothing. Wear goggles or face shield. Wear protective clothing and rubber gloves. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Remove contaminated clothing and wash clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT

- Applicators and other handlers must wear:
- Coveralls over long-sleeved shirt and long pants,
- Socks and chemical resistant footwear,
- Goggles or face shield,
- Chemical-resistant gloves (such as: Barrier Laminate or Viton),
- A NIOSH-approved respirator with an ammonia, organic, and HEPA cartridge such as P-100.

USER SAFETY REQUIREMENTS AND RECOMMENDATIONS

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate.

Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. User should remove personal protective equipment immediately after handling this product. Wash outside of gloves before removing. As soon as possible wash thoroughly.

ENVIRONMENTAL HAZARDS:

This product is toxic to fish and wildlife. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of EPA.

Net Contents:

Wolman® E (CA-B)

For Industrial Use Only  
INGREDIENTS:

ACTIVE INGREDIENTS:	
Copper (elemental)*	9.25%
Tebuconazole: alpha-(2-(4-chlorophenyl)ethyl)-alpha-(1,1-dimethylethyl)-1H-1,2,4-triazole-1-ethanol	0.37%
INERT INGREDIENTS:	90.38%
Total	100.00%
*Mixed inorganic copper complexes may be expressed as copper elemental equivalent.	

KEEP OUT OF REACH OF CHILDREN  
DANGER

FIRST AID

IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
  - Do not induce vomiting unless told to do so by poison control center or doctor.
  - Have person sip a glass of water if able to swallow.
  - Do not give anything by mouth to an unconscious person.
- IF ON SKIN OR CLOTHING:
- Take off contaminated clothing.
  - Rinse skin immediately with plenty of water for 15-20 minutes.

- Call a poison control center or doctor for treatment advice.
- IF IN EYES:
- Hold eye and rinse slowly and gently with water for 15-20 minutes.

- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

IF INHALED:

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable by mouth-to-mouth if possible.
- Call a poison control center or doctor for further treatment advice.

See side panel for additional precautionary statement.

Have the MSDS or label with you when calling a poison control center or doctor, or going for treatment.

FOR MEDICAL EMERGENCIES: 1-800-837-0496

Outside USA: 404-616-9000

\*NOTE TO PHYSICIAN\*: Probable mucosal damage may contraindicate the use of gastric lavage. If breathing has stopped or is difficult, administer artificial respiration or oxygen as indicated.

**DIRECTIONS FOR USE:** It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Contents for use only in pressure-treating wood products. Do not attempt to use without reading the Manual and having the necessary safety equipment. To be used only in vacuum pressure impregnation of wood products utilizing water solutions having concentrations ranging from 0.3 percent to 3.0 percent active ingredients by weight. Impregnation procedures must rigidly adhere to the current specifications of Arch Wood Protection and/or the American Wood-Preservers Association.

Processes used to apply Copper Azole formulations shall leave no visible surface deposits on the wood, as defined by AWP/A Standard P5-96. Visible surface deposits means a surface residue or crystallization on the treated wood. Small isolated or infrequent spots of chemical on otherwise clean wood shall be allowed.

Pressure treatment of wood products with this Copper Azole wood preservative provides wood with protection against termites, ascomycetes, white rot, brown rot and dry rot.

STORAGE AND DISPOSAL:

Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in a cool, dry and well-ventilated area. Keep in tightly closed containers. Store away from incompatible materials. Protect containers from physical damage. Observe all applicable local, state, federal guidelines for storage and disposal.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incinerate, or, if allowed by state and local authorities, burn. If burned, stay out of smoke.

**WARRANTY:** We warrant this material to comply with our published specifications and to be of good merchantable quality and such as will regularly pass in the trade for goods within the description, and further warrant it to be fit for the normal purposes for which such goods are used. We assume no responsibility that this material is fit for any particular purpose outside of the general purposes of goods of the description.

Manufactured for Arch Wood Protection, Smyrna, GA 30080  
ACEAN 24-Hr. Emg. Resp. 800-654-6911

EPA Registration No.: 62190-22  
Establishment No.: 1258-NV-03 ☐



**MATERIAL SAFETY DATA SHEET**  
**WOLMAN® E (CA-B) WOOD PRESERVATIVE CONCENTRATE**  
**WOLMAN® NB WOOD PRESERVATIVE CONCENTRATE**  
**June 1, 2003**

---

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier:** Wolman® E (CA-B) Wood Preservative Concentrate      **EPA Reg #** 62190-22  
**Product Identifier:** Wolman® NB Wood Preservative Concentrate      **Canadian Reg. #** 27132  
**General Use:** General-use pesticide for wood preservative.

**MANUFACTURER:**  
ARCH TREATMENT TECHNOLOGIES, INC.  
3941 Bonsal Road  
Conley, Georgia 30288  
MSDS Information: 1-800-511-6737

**EMERGENCY TELEPHONE NUMBERS:**  
\*CHEMTREC Assistance: 1-800-424-9300  
\*CANUTEC: 1-613-996-6666  
ACEAN 24 Hour Emg Resp: 1-800-654-6911  
\*Use only during transportation emergencies

---

**2. COMPOSITION / INFORMATION ON INGREDIENTS**

HAZARDOUS INGREDIENTS	CAS #	EXPOSURE LIMITS (mg/m <sup>3</sup> )		
		OSHA-PEL	ACGIH-TLV	ACGIH-STEL
Copper (as elemental)	7440-50-8	1.0 (as Cu)	1.0 (as Cu)	
Tebuconazole	107534-96-3	Not Established	Not Established	
Ethanolamine	141-43-5	6.0	7.5	15
Inert Ingredients (and H <sub>2</sub> O)	NA	Not Established		

---

**3. HAZARDS IDENTIFICATION**

**Inhalation:** Product may cause upper respiratory irritation.

**Eye Contact:** Product may cause severe eye irritation or possible eye burns.

**Skin Contact:** The product has been shown to cause skin irritation in rabbits.

**Ingestion:** Product may cause moderate to severe gastrointestinal irritation resulting in nausea, cramps and/or diarrhea. Possible systemic effects of swallowing this product may include kidney and liver damage, central nervous system depression, cyanosis, skin sores, convulsions, and collapse or coma.

---

**4. FIRST AID MEASURES**

**Inhalation:** Remove from exposure. If severe breathing difficulty should arise immediately seek medical aid. If breathing has stopped, administer artificial respiration or oxygen.

**Eye Contact:** Exposed eyes should be flushed with large amounts of saline or water for at least 15 minutes, (greater than 1 liter per eye, minimum) using low pressure, taking care that the eyes remain open during this entire procedure. If wearing contact lenses, immediately flush eyes with water for a short period prior to removing contacts, then resume flushing procedures as described above. Immediately seek medical aid.

**Skin Contact:** Flush exposed skin with large amounts of water. Then use soap and water to clean area. Remove contaminated clothing. Seek medical aid if severe irritation develops.

**Ingestion:** DO NOT induce vomiting. Seek medical aid immediately. Do not attempt to give anything to an unconscious person. Call a physician or poison center at (800) 837-0496 (Outside the US call 1-404-616-9000.)

---

**5. FIRE FIGHTING MEASURES**

<b>Flash Point</b>	>200°F	<b>Lower Explosive Limit</b>	NA
<b>Auto-ignition</b>	NA	<b>Upper Explosive Limit</b>	NA

**Extinguishing Agents:** Use water, dry chemical, or other common extinguishing media.

**Fire-Fighting Procedures:** Fire from a separate fuel source may be intense enough to cause thermal decomposition releasing toxic fumes and/or gases. Wear complete fire service protective equipment, including full-face NIOSH and NFPA – approved self-containing breathing apparatus.

**Fire and Explosion Hazard:** Minimal fire and explosion hazard when exposed to heat or flame.

*\*Do not weld on empty uncleaned containers.*

---

---

## 6. ACCIDENTAL RELEASE MEASURES

**Spill or Leak Procedures:** (Product): Stop leak if no risk involved. Contain spill by using an inert non-biodegradable absorbent material (e.g., kitty litter or synthetic absorbents). Shovel into an appropriate container and dispose of waste in accordance with federal, state and local regulations. If material can be recovered, use a vacuum system designed for liquid recovery. Keep all unnecessary personnel away from the spill area. Keep open flames or ignition sources away. If a reportable quantity (RQ) is released into the environment, report to the National Response Center (1-800-424-8802), the State Emergency Planning Commission (SERC), the Local Emergency Planning Committee (LEPC) and/or your local fire department depending on availability.

**Reportable Quantities:** Not Applicable. State or Local notification may still be required.

**Waste Disposal:** As of the date on this MSDS, this product is not considered a hazardous waste under 40 CFR part 261. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Check local and state regulations, as they may be more stringent.

---

## 7. HANDLING AND STORAGE

**Storage Conditions:** KEEP FROM FREEZING (above 40F) as product gets very viscous. Store in a cool, dry and well ventilated area. Keep in tightly closed containers. Store away from incompatible materials. Protect containers from physical damage. Observe all local, state and federal guidelines for storage and disposal.

**Caution:** Avoid contact with skin, eyes, and clothing. Wear protective goggles/shield, gloves and clothing. Avoid breathing mist and vapors. Keep use areas well ventilated. Wash thoroughly after handling. Remove any contaminated clothing. An eyewash and shower (quick-drench facility) should be maintained in the work area.

---

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Respiratory Protection:** None normally required. However, if airborne concentrations exceed established OSHA PEL, use NIOSH approved air-purifying respirator equipped with combination organic, ammonia and P100 high efficiency particulate filters (HEPA).

**Eye Protection:** Splash-proof chemical goggles and face shield should be worn wherever splash hazards exist.

**Skin/Foot Protection:** PVC, polyethylene or neoprene gloves are recommended. Wear long sleeves, pants and leather or rubber shoes. Coveralls or aprons if needed.

**Ventilation:** Provide adequate ventilation to keep airborne levels of contaminants below OSHA PEL levels.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Blue Liquid	<b>Boiling P</b>	107°C	<b>Specific Gravity (Water =1)</b>	1.18 to 1.22 @ 22°C
<b>Odor</b>	Amine	<b>Freezing Pt.</b>	<-30°C	<b>Vapor Density (Air=1)</b>	NA
<b>Solubility in Water</b>	Soluble	<b>pH</b>	9.3 -11.0	<b>Viscosity</b>	25-30 cps @ 22°C
<b>Physical State</b>	Liquid				

---

## 10. STABILITY AND REACTIVITY

**Conditions contributing to instability:** Stable under normal conditions.

**Incompatibilities:** Oxidizers, strong acids, cellulose nitrates, sodium hypobromite, acetylene, hydrazine, nitromethane, aluminum, and zinc.

**Hazardous Reactions/Decomposition/Combustion Products:** Toxic or hazardous oxides of carbon and/or nitrogen.

**Hazardous Polymerization:** Not known to occur.

---

## 11. TOXICOLOGICAL INFORMATION

**Oral Toxicity:** LD50= 547 mg/kg (rat testing)

**Dermal Toxicity:** LD50= >2,000, <5,000 mg/kg

## 12. ECOLOGICAL INFORMATION

This product is toxic to fish and wildlife. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to the discharge. Do not discharge this product into sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of EPA. As of the date on the MSDS, this product does not meet the characteristic or listed Federal hazardous waste regulations. State regulations may be more stringent. Dispose of in accordance with local, state, and federal regulations.

---

## 13. DISPOSAL CONSIDERATIONS

As of the date of this MSDS, this product is not considered a hazardous waste under 40 CFR part 261. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Check local and state regulations, as they may be more stringent.

---

## 14. TRANSPORT INFORMATION

**DOT Hazardous Material Classification:** Ethanolamine solution, 8, UN2491, III  
**Use North American Emergency Response Guide # 153**

---

## 15. REGULATORY INFORMATION

**CERCLA/SARA (40 CFR 302.4):** As of the date on this MSDS, there are no hazardous materials that have a reportable quantity under this regulation. State or local notification may still be required.

**SARA 311/312 (40 CFR 370):** This product is an OSHA hazardous material under 29 CFR 1910.1200, therefore, it is regulated under the Superfund Amendments and Reauthorization Act (SARA) Sections 311 and 312. A facility must report chemical storage quantities that equal or exceed 10,000 pounds anytime during the reporting year to the appropriate state and local agencies.

**SARA 313 (40 CFR 372):** This product requires a Toxic Release Inventory reporting for individual material uses of 25,000 pounds or more. Reporting is under Copper Compounds.

**RCRA (40 CFR 261):** As of the date of this MSDS, this product is not considered a hazardous waste under 40 CFR part 261. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Check local and state regulations, as they may be more stringent.

**OSHA (29 CFR 1910.1200):** This product is regulated by the Occupational Safety and Health Administration (OSHA) under the Hazard Communication Standard (29 CFR 1910.1299)

**NFPA:** 2-Health, 0-Flammability, 0-Reactivity

**HMIS Ratings:** Health: 3 Flammability: 0 Physical Hazards: 0 PPE: Chemical goggles, gloves

---

## 16. OTHER INFORMATION

### ABBREVIATIONS

<b>OSHA</b>	Occupational Safety and Health Administration
<b>NFPA</b>	National Fire Protection Association
<b>FIFRA</b>	Federal Insecticide, Fungicide and Rodenticide Act
<b>CERCLA</b>	Comprehensive Environmental Response, Compensation, and Liability Act
<b>SARA</b>	Superfund Authorization and Reauthorization Act
<b>PEL</b>	Permissible Exposure Limit
<b>DOT</b>	Department of Transportation
<b>NTP</b>	National Toxicology Program
<b>CFR</b>	Code of Federal Regulations
<b>CWA</b>	Clean Water Act
<b>CAS</b>	Chemical Abstracts Service

<b>TLV</b>	Threshold Limit Value
<b>STEL</b>	Short-Term Exposure Limit
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>ACGIH</b>	American Conference of Governmental Industrial Hygienists
<b>NIOSH</b>	National Institute of Occupational Safety and Health
<b>TSCA</b>	Toxic Substances Control Act
<b>IARC</b>	International Agency for Research on Cancer
<b>IBC</b>	International Building Code
<b>mg/m3</b>	Milligrams per cubic meter
<b>CAA</b>	Clean Air Act

**NOTICE:** While the information and recommendations set forth herein are believed to be accurate as of the date hereof, Arch Treatment Technologies, Inc. makes no guarantee or warranty, expressed or implied, as to the accuracy, reliability, or completeness of the information.